

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

GENERAL PERMIT NO. NCG590000- Water Treatment Plant Dischargers

TO DISCHARGE BACKWASH WASTEWATERS FROM
GREENSAND AND CONVENTIONAL TYPE WATER TREATMENT FACILITIES.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended, this permit is hereby issued to all owners or operators, hereafter permittees, which are covered by this permit as evidenced by receipt of a Certificate of Coverage from the Environmental Management Commission to allow the discharge of treated wastewaters from iron and manganese removal processes and similar wastewaters; and water purification facilities with filter backwash, sedimentation basin washdown, and decant from water treatment in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective **August 1, 2014**.

This permit shall expire at midnight on **July 31, 2019**.

Signed this day **August 1, 2014**

Original Signed by Jeff Poupart

for

Thomas A. Reeder, Director
Division of Water Resources
By Authority of the Environmental Management Commission

PART 1

A. Coverage

(1.) Eligibility of Coverage

- a. Existing Greensand Water Treatment Plants (WTPs) with individual NPDES permits and new facilities seeking a NPDES permit for a greensand water purification system utilizing Iron and/or Manganese removal systems are eligible for coverage under this general permit. Backwash wastewaters from similar activities such as sand filtration or systems utilizing calcite filtration are eligible and covered under the Greensand WTP effluent requirements section in this general permit.
- b. Existing Conventional WTPs with a wastewater discharge resulting from water purification facilities with filter backwash, sedimentation basin washdown, and decant from water treatment facilities are eligible for coverage under this general permit.

(2.) Limitations on Coverage

- a. Although this general permit does not cover the following types of discharges, other permits such as an individual NPDES permit, an alternate general permit, or other approval from the Division may be obtained. This permit does not authorize discharges from Water Treatment Plants with the following:
 - Discharges that are mixed with other process wastewaters.
 - Discharges to waters classified as High Quality Waters (HQW) or Outstanding Resource Waters (ORW).
 - Discharges from water purification systems using Membrane Treatment (Reverse Osmosis) or Ion Exchange.
 - Discharges that would adversely affect a Federal or State listed endangered or threatened species or its critical habitat.
 - Discharges of pollutants to an impaired waterbody in excess of the wasteload allocation specified in an EPA-Approved TMDL (Total Maximum Daily Load).
 - Discharges from new Conventional WTPs proposing a discharge to surface waters.
- b. New Conventional WTPs proposing a discharge to surface waters shall be covered under an individual permit for at least one permit cycle. Upon permit renewal, if an evaluation of the facility's wastewaters shows no need for additional limitations or requirements beyond what is contained in this general permit, then the permittee will be considered for coverage.
- c. Conventional WTPs proposing to expand existing facilities shall submit a Notice of Intent (NOI) permit application with the proposed expansion/treatment details and an Engineering Alternative Analysis for Division review and approval in order to obtain coverage for the expansion under this permit and receive a revised Certificate of Coverage (CoC).
- d. This permit does not authorize discharges that the Division has determined to be or which may reasonably be expected to be contributing to a violation of a water quality standard (as defined in the "Red Book" or NC Administrative Code 15A NCAC 02B .0100, .0200, and .0300).
- e. If the Division determines at any time that the discharge is causing or contributing to a violation of water quality standards or if the Division has any other grounds for modifying or revoking this permit, the Division may require corrective action or require the discharge be permitted differently in accordance with Part II, Section B of this permit. The Division may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the Notice of Intent (NOI) or other information.
- f. Whole Effluent Toxicity (WET) test results for the past three years shall be reviewed for existing or expanding Conventional WTPs applying for coverage under this general permit. Permittees with WET test results showing potential for aquatic toxicity may be denied coverage under this general permit which includes a WET limitation of "Pass".

(3.) Transfer Coverage from Other Permits

Upon issuance of this general permit, all existing and active individual permits for Greensand and Conventional type WTPs will automatically be considered for coverage under this general permit as permit renewal applications are received.

B. (1.) Greensand WTP Effluent Limitations and Monitoring Requirements – Discharging to Freshwater

a. During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge wastewaters from iron and manganese removal type systems for the purpose of water purification to the receiving waters. Such discharges shall be limited and **monitored**¹ by the Permittee as specified below:

PARAMETER	EFFLUENT LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum ²	Measurement Frequency	Sample Type	Sample Location
Flow ³	Monitor Only (MGD)		Twice per Month	Instantaneous Or Estimate	Effluent
Total Suspended Solids ⁴	30.0 mg/l (Exception: Trout Waters)	45.0 mg/L (Exception: Trout Waters)	Twice per Month	Grab	Effluent
Total Residual Chlorine ⁵	-	17 µg/L	Twice per Month	Grab	Effluent
pH	6.0 ≤ pH ≤ 9.0 s.u.		Monthly	Grab	Effluent
Turbidity ⁶	50 NTU daily maximum (Exceptions: Trout Waters, Lakes & Reservoirs)		Monthly	Grab	Effluent
Total Manganese ^{7,8}	Monitor Only µg/L (Exception: WS Waters)		Quarterly	Grab	Effluent
Total Iron ⁷	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Zinc ⁹	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Fluoride ¹⁰	Monitor Only (µg/L)		Quarterly	Grab	Effluent

Footnotes:

1. eDMR: No later than 270 days from the effective date listed on the CoC issued with this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition C.
 2. The Daily Maximum limits apply to all permittees. More stringent limitations apply to discharges to Trout and Water Supply (WS) Waters and Lakes & Reservoirs as noted above and detailed in the footnotes below. Refer to the Certificate of Coverage (CoC) for receiving stream classifications.
 3. For instantaneous flow monitoring, the duration of the discharge must be reported in addition to the total flow.
 4. TSS: Permittees discharging to Trout waters shall not exceed a monthly average of 10 mg/L and a daily maximum limit of 15 mg/L.
 5. TRC: Limit and monitoring requirements only apply if the facility adds chlorine or chlorine derivatives to water that is eventually discharged. The Division shall consider all effluent TRC values reported below 50 ug/L to be in compliance with the permit. However, the Permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below 50 ug/L.
 6. Turbidity: The Turbidity Daily Maximum effluent limit is 10 NTU for Trout waters and 25 NTU for Lakes & Reservoirs not designated as trout waters.
 7. Iron & Manganese: This sampling requirement does not apply to backwash from calcite filtration or similar systems which are not designed for iron or manganese removal and are not blended with other WTP wastewaters.
 8. Total Manganese: Permittees discharging to WS waters shall not exceed the manganese water quality standard defined in Administrative Code 15A NCAC 2B .0100, .0200, and .0300. Currently the water quality standard for manganese is a daily maximum limit of 200 µg/L.
 9. Zinc: This requirement applies only to wastewater discharges from plants that use water treated with zinc orthophosphate for backwashing filters.
 10. Fluoride: This requirement applies only to wastewater discharges from plants that backwash with fluoridated finished water.
- b. SAMPLES SHALL BE TAKEN AT THE OUTFALL BUT PRIOR TO MIXING WITH THE RECEIVING WATERS
- c. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR FOAM IN OTHER THAN TRACE AMOUNTS.

B. (2.) Greensand WTP Effluent Limitations and Monitoring Requirements – Discharging to Saltwater

a. During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge wastewaters from iron and manganese removal type systems for the purpose of water purification to the receiving waters. Such discharges shall be limited and **monitored**¹ by the Permittee as specified below:

PARAMETER	EFFLUENT LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum ²	Measurement Frequency	Sample Type	Sample Location
Flow ³	Monitor Only (MGD)		Twice per Month	Instantaneous Or Estimate	Effluent
Total Suspended Solids ⁴	30.0 mg/l	45.0 mg/l	Twice per Month	Grab	Effluent
Total Residual Chlorine ⁵	-	13 µg/l	Twice per Month	Grab	Effluent
pH	$6.8 \leq \text{pH} \leq 8.5$ s.u.		Monthly	Grab	Effluent
Turbidity		25 NTU	Monthly	Grab	Effluent
Total Manganese ⁶	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Zinc ⁷	Monitor Only (µg/L)		Quarterly	Grab	Effluent

Footnotes:

1. eDMR: No later than 270 days from the effective date listed on the CoC issued with this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition C.
2. The Daily Maximum limits apply to all permittees.
3. For instantaneous flow monitoring, the duration of the discharge must be reported in addition to the total flow.
4. TSS: Permittees discharging to Trout waters shall not exceed a monthly average of 10 mg/L and a daily maximum limit of 15 mg/L.
5. TRC: Limit and monitoring requirements only apply if the facility adds chlorine or chlorine derivatives to water that is eventually discharged. The Division shall consider all effluent TRC values reported below 50 ug/l to be in compliance with the permit. However, the Permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below 50 ug/l.
6. Manganese: This sampling requirement does not apply to backwash from calcite filtration, or similar systems not designed for iron or manganese removal and are not blended with other WTP wastewaters.
7. Zinc: This requirement applies only to wastewater discharges from plants that use water treated with zinc orthophosphate for backwashing filters.

b. SAMPLES SHALL BE TAKEN AT THE OUTFALL BUT PRIOR TO MIXING WITH THE RECEIVING WATERS.

c. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR FOAM IN OTHER THAN TRACE AMOUNTS.

B. (3). Conventional WTP Effluent Limitations and Monitoring Requirements - Discharging to Freshwater

a. During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge treated wastewaters from filter backwash, sedimentation basin washdown, and decant from water treatment facilities to the receiving waters. Such discharges shall be limited and **monitored**¹ by the permittee as specified below:

PARAMETERS	EFFLUENT LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum ²	Measurement Frequency	Sample Type	Sample Location
Flow ³	Monitor Only (MGD)		See footnote 3	See footnote 3	Effluent
Total Suspended Solids ⁴	30.0 mg/l (Exception: Trout Waters)	45.0 mg/l (Exception: Trout Waters)	Twice per Month	Grab	Effluent
Total Residual Chlorine ⁵	-	17 µg/l	Twice per Month	Grab	Effluent
pH	6.0 ≤ pH ≤ 9.0 s.u.		Monthly	Grab	Effluent
Turbidity ⁶	50 NTU daily maximum (Exceptions: Trout Waters, Lakes & Reservoirs)		Monthly	Grab	Effluent
Total Aluminum ⁷	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Iron ⁸	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Copper	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Manganese ⁹	Monitor Only µg/L (Exception: WS Waters)		Quarterly	Grab	Effluent
Total Zinc ¹⁰	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Fluoride ¹¹	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Ammonia Nitrogen ¹²	Monitor Only (mg/L)		Quarterly	Grab	Effluent
Total Nitrogen ¹³ (TN)	Monitor Only (mg/L)		Quarterly	Grab	Effluent
Total Phosphorus ¹³ (TP)	Monitor Only (mg/L)		Quarterly	Grab	Effluent
Whole Effluent Toxicity ¹⁴	Pass		Annually	24-hr Composite	Effluent

Footnotes:

1. eDMR: No later than 270 days from the effective date listed on the CoC issued with this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition C.
2. The Daily Maximum limits apply to all permittees. More stringent limitations apply to discharges to Trout and Water Supply (WS) Waters and Lakes & Reservoirs as noted above and detailed in the footnotes below. Refer to the Certificate of Coverage (CoC) for receiving stream classifications.
3. **Flows < 0.05 MGD** shall sample Twice per Month and can estimate or use instantaneous flow monitoring.
For instantaneous flow monitoring, the duration of the discharge must be reported on the DMR in addition to the total flow.

Flows ≥ 0.05 MGD shall continuously record the effluent discharge.

Facilities shall use the design discharge flow as the flow value. Facilities without a design discharge flow shall define flow using the maximum value of all the monthly average discharge flows recorded during the past three years. Facilities proposing an expansion, shall determine a maximum design wastewater discharge flow value as part of the facility design.

4. TSS: Permittees discharging to Trout waters shall not exceed a monthly average of 10 mg/L and a daily maximum limit of 15 mg/L.
5. TRC: Limit and monitoring requirements only apply if the facility adds chlorine or chlorine derivatives to water that is eventually discharged. The Division shall consider all effluent TRC values reported below 50 ug/l to be in compliance with the permit. However, the Permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below 50 ug/l.

Footnotes continued:

6. Turbidity: The Turbidity Daily Maximum effluent limit is 10 NTU for Trout waters and 25 NTU for Lakes & Reservoirs not designated as trout waters.
 7. Total Aluminum: This requirement applies only to wastewater discharges from plants that use an aluminum-based coagulant.
 8. Total Iron: This requirement applies only to wastewater discharges from plants that use iron filtration or an iron-based coagulant.
 9. Total Manganese: Permittees discharging to WS waters shall not exceed the manganese water quality standard defined in Administrative Code 15A NCAC 2B .0100, .0200, and .0300. Currently the water quality standard for manganese is a daily maximum limit of 200 µg/L.
 10. Total Zinc: This requirement applies only to wastewater discharges from plants that use backwash water treated with zinc orthophosphate.
 11. Total Fluoride: This requirement applies only to wastewater discharges from plants that backwash with fluoridated finished water.
 12. Ammonia Nitrogen: This requirement applies only to wastewater discharges from plants that use water treated with chloramines (add ammonia to chlorinated water) for backwashing.
 13. TN & TP shall be monitored by facilities discharging to NSW waters **or** facilities with a discharge flow ≥ 0.05 MGD.
TN = TKN + NO₃-N + NO₂-N, where TKN is Total Kjeldahl Nitrogen and NO₃-N + NO₂-N are Nitrate and Nitrite Nitrogen, respectively.
 14. Whole Effluent Toxicity testing shall be performed once per calendar year. See section D.
- b. SAMPLES SHALL BE TAKEN AT THE OUTFALL BUT PRIOR TO MIXING WITH THE RECEIVING WATERS.
- c. METALS SHOULD BE SAMPLED IN CONJUNCTION WITH TOXICITY TESTS.
- d. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR FOAM IN OTHER THAN TRACE AMOUNTS.

B. (4). Conventional WTP Effluent Limitations and Monitoring Requirements - Discharging to Saltwater

a. During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge treated wastewaters from filter backwash, sedimentation basin washdown, and decant from water treatment facilities to the receiving waters. Such discharges shall be limited and **monitored**¹ by the permittee as specified below:

PARAMETERS	EFFLUENT LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum ²	Measurement Frequency	Sample Type	Sample Location
Flow ³	Monitor Only (MGD)		See footnote 3	See footnote 3	Effluent
Total Suspended Solids	30.0 mg/l	45.0 mg/l	Twice per Month	Grab	Effluent
Total Residual Chlorine ⁴	-	13 µg/l	Twice per Month	Grab	Effluent
pH	6.8 ≤ pH ≤ 8.5 s.u.		Monthly	Grab	Effluent
Turbidity		25 NTU	Monthly	Grab	Effluent
Total Aluminum ⁵	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Copper	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Manganese	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Total Zinc ⁶	Monitor Only (µg/L)		Quarterly	Grab	Effluent
Ammonia Nitrogen ⁷	Monitor Only (mg/L)		Quarterly	Grab	Effluent
Total Nitrogen ⁸ (TN)	Monitor Only (mg/L)		Quarterly	Grab	Effluent
Total Phosphorus ⁸ (TP)	Monitor Only (mg/L)		Quarterly	Grab	Effluent
Whole Effluent Toxicity ⁹	Pass		Annually	24-hr Composite	Effluent

Footnotes:

1. eDMR: No later than 270 days from the effective date listed on the CoC issued with this permit, begin submitting discharge monitoring reports electronically using NC DWR's eDMR application system. See Special Condition C.
2. The Daily Maximum limits apply to all permittees.
3. **Flows < 0.05 MGD** shall sample Twice per Month and can estimate or use instantaneous flow monitoring.
For instantaneous flow monitoring, the duration of the discharge must be reported on the DMR in addition to the total flow.

Flows ≥ 0.05 MGD shall continuously record the effluent discharge.

Facilities shall use the design discharge flow as the flow value. Facilities without a design discharge flow value shall define flow using the maximum value of all the monthly average discharge flows recorded during the past three years. Facilities proposing an expansion, shall determine a maximum design wastewater discharge flow value as part of the facility design.

4. TRC: Limit and monitoring requirements only apply if the facility adds chlorine or chlorine derivatives to water that is eventually discharged. The Division shall consider all effluent TRC values reported below 50 ug/l to be in compliance with the permit. However, the Permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below 50 ug/l.
5. Total Aluminum: This requirement applies only to wastewater discharges from plants that use an aluminum-based coagulant.
6. Total Zinc: This requirement applies only to wastewater discharges from plants that use backwash water treated with zinc orthophosphate.
7. Ammonia Nitrogen: This requirement applies only to wastewater discharges from plants that use water treated with chloramines (add ammonia to chlorinated water) for backwashing.

Footnotes continued:

8. TN & TP shall be monitored by facilities discharging to NSW waters **or** facilities with a discharge flow ≥ 0.05 MGD.
TN = TKN + NO₃-N + NO₂-N, where TKN is Total Kjeldahl Nitrogen and NO₃-N + NO₂-N are Nitrate and Nitrite Nitrogen, respectively. Refer to the Certificate of Coverage (CoC) for receiving stream classifications.
 9. Whole Effluent Toxicity testing shall be performed once per calendar year. See section D.
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- b. SAMPLES SHALL BE TAKEN AT THE OUTFALL BUT PRIOR TO MIXING WITH THE RECEIVING WATERS.
 - c. METALS SHOULD BE SAMPLED IN CONJUNCTION WITH TOXICITY TESTS.
 - d. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR FOAM IN OTHER THAN TRACE AMOUNTS.

C. ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS

Proposed federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and specify that, if a state does not establish a system to receive such submittals, then permittees must submit DMRs electronically to the Environmental Protection Agency (EPA). The Division anticipates that these regulations will be adopted and is beginning implementation in late 2013.

NOTE: This special condition supplements or supersedes the following sections within Part II of this permit (*Standard Conditions for NPDES Permits*):

- Section B. (11.) Signatory Requirements
- Section D. (2.) Reporting
- Section D. (6.) Records Retention
- Section E. (5.) Monitoring Reports

1. Reporting [Supersedes Section D. (2.) and Section E. (5.) (a)]

Beginning no later than 270 days from the effective date listed on the Certificate of Coverage issued with this permit, the permittee shall begin reporting discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application.

Monitoring results obtained during the previous month(s) shall be summarized for each month and submitted electronically using eDMR. The eDMR system allows permitted facilities to enter monitoring data and submit monthly DMRs electronically using the internet. Until such time that the state's eDMR application is compliant with EPA's Cross-Media Electronic Reporting Regulation (CROMERR), permittees will be required to submit all discharge monitoring data to the state electronically using eDMR and will be required to complete the eDMR submission by printing, signing, and submitting one signed original and a copy of the computer printed eDMR to the following address:

NC DENR / DWR / Information Processing Unit
 ATTENTION: Central Files / eDMR
 1617 Mail Service Center
 Raleigh, North Carolina 27699-1617

If a permittee is unable to use the eDMR system due to a demonstrated hardship or due to the facility being physically located in an area where less than 10 percent of the households have broadband access, then a temporary waiver from the NPDES electronic reporting requirements may be granted and discharge monitoring data may be submitted on paper DMR forms (MR 1, 1.1, 2, 3) or alternative forms approved by the Director. Duplicate signed copies shall be submitted to the mailing address above.

Requests for temporary waivers from the NPDES electronic reporting requirements must be submitted in writing to the Division for written approval at least sixty (60) days prior to the date the facility would be required under this permit to begin using eDMR. Temporary waivers shall be valid for twelve (12) months and shall thereupon expire. At such time, DMRs shall be submitted electronically to the Division unless the permittee re-applies for and is granted a new temporary waiver by the Division.

Information on eDMR and application for a temporary waiver from the NPDES electronic reporting requirements is found on the following web page:

<http://portal.ncdenr.org/web/wq/admin/bog/ipu/edmr>

Regardless of the submission method, the first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge.

2. Signatory Requirements [Supplements Section B. (11.) (b) and supersedes Section B. (11.) (d)]

All eDMRs submitted to the permit issuing authority shall be signed by a person described in Part II, Section B. (11.) (a) or by a duly authorized representative of that person as described in Part II, Section B. (11.) (b). A person, and not a position, must be delegated signatory authority for eDMR reporting purposes.

For eDMR submissions, the person signing and submitting the DMR must obtain an eDMR user account and login credentials to access the eDMR system. For more information on North Carolina's eDMR system, registering for eDMR and obtaining an eDMR user account, please visit the following web page:

<http://portal.ncdenr.org/web/wq/admin/bog/ipu/edmr>

Certification. Any person submitting an electronic DMR using the state's eDMR system shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

3. Records Retention [Supplements Section D. (6.)]

The permittee shall retain records of all Discharge Monitoring Reports, including eDMR submissions. These records or copies shall be maintained for a period of at least 3 years from the date of the report. This period may be extended by request of the Director at any time [40 CFR 122.41].

D. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

(1.) Applicability

Facilities having Conventional Water Treatment Plant processes are required to perform annual toxicity tests each calendar year using one of the following procedures:

- a. CHRONIC TOXICITY PASS/FAIL PERMIT LIMIT APPLIES TO –
Discharges to Freshwater with an Instream Waste Concentration* (IWC) $\geq 0.25\%$
Discharges to Saltwater with a Modeled Dilution
- b. ACUTE TOXICITY PASS/FAIL PERMIT LIMIT APPLIES TO –
Discharges to Freshwater with an Instream Waste Concentration* (IWC) $< 0.25\%$
Discharges to Saltwater with Tidal receiving waters not modeled

The test organism for facilities discharging to freshwaters shall be *Ceriodaphnia dubia*, unless another test organism has been authorized for use by the Division and is listed in the Supplement to the Certificate of Coverage. The test organism for facilities discharging to saltwaters shall be *Mysidopsis bahia*, unless another test organism has been authorized for use by the Division and is listed in the Supplement to the Certificate of Coverage. Authorization to change the test type and organism can be obtained from the Water Sciences Section in the Division of Water Resources.

* The IWC or modeled dilution will be specified on the Supplement to the Certificate of Coverage (CoC) issued with the General Permit. A discussion on how the percent effluent concentration is determined, can be found in the General Permit Fact Sheet. If the IWC exceeds 90%, a maximum default value of 90% effluent shall be used for WET testing.

(2.) CHRONIC TOXICITY PASS/FAIL PERMIT LIMIT APPLIES TO –

Discharges to Freshwater with an Instream Waste Concentration (IWC) $\geq 0.25\%$, and
Discharges to Saltwater with a Modeled Dilution

For Freshwater receiving streams the effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to *Ceriodaphnia dubia* (or other approved test organism) at an effluent concentration specified on the Supplement to the CoC issued with this general permit.

For Saltwater receiving streams the effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to *Mysidopsis bahia* (or other approved test organism) at an effluent concentration specified on the Supplement to the CoC issued with this general permit.

The permit holder shall perform at a minimum, annual monitoring using procedures described below to establish compliance with the permit condition. WET tests shall be performed once per calendar year. Effluent sampling for this testing must be obtained during representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

If the test procedure performed as the first test of the year results in a failure or ChV below the permit limit, then multiple-concentration testing shall be performed at a minimum, in each of the two following months.

For freshwater receiving streams the test shall be performed as described in “North Carolina *Ceriodaphnia* Chronic Whole Effluent Toxicity Test Procedure” (Revised-December 2010).

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the month(s) in which the test were performed, using the parameter code

TGP3B for the pass/fail results and **THP3B** for the Chronic Value on the DWR Form AT-3.

For saltwater receiving streams the test shall be performed as described in EPA Method 1007.0\Mysid\Mysidopsis bahia\Survival, Growth, and Fecundity Test, as described in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, EPA821-R-02-014, October 2002. The procedure will be performed as written with the following exceptions:

- The test treatments will consist of a control and the effluent concentration listed on the Supplement to the CoC (“pass/fail”), or a control and five effluent concentrations, one of which will be one-half the effluent concentration listed on the Supplement to the CoC and one of which will be twice the effluent concentration listed on the Supplement to the CoC .
- Mortality for pass/fail tests will be evaluated using the t test described in Section 11.3 in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fifth Edition. EPA—821-R-02-012, October 2002, applying an alpha level of 0.05.
- The growth endpoint for pass/fail tests will be determined using Appendix G of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, EPA-821-R-02-014, October 2002, applying an alpha level of 0.01.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the month(s) in which tests were performed. For pass/fail results, report using the parameter code **TGP3E** and the **DWR Form AT-4** (original), which is to be sent to the address below. Additionally, for reporting Chronic Value results use the parameter code **THP3E** and **DWR Form AT-6**.

The original signed forms shall be sent to the following address:

Attention: North Carolina Division of Water Resources
Water Sciences Section
1621 Mail Service Center
Raleigh, N.C. 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Water Sciences Section no later than 30 days after the end of the month in which the toxicity test was sampled.

The permittee must report on the discharge monitoring report (DMR) form whether the test passes or fails at the specified effluent concentration.

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during the year in which toxicity monitoring is required, the permittee will submit the aquatic toxicity (AT) test form with the notation of “No Flow” in

the comment area of the form. The report shall be submitted to the Water Sciences Section at the address cited above.

Should the permittee fail to monitor during the year in which toxicity monitoring is required, then quarterly monitoring shall begin immediately. Upon passing, this quarterly test requirement will revert back to an annual requirement of once per calendar year.

Should any test data from this monitoring requirement or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, the permittee may be required to perform additional testing and, if necessary, apply for an individual permit that could include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival, minimum control organism reproduction, and appropriate environmental controls, shall constitute an **invalid test** and will require immediate follow-up testing to be completed no later than the last day of the month following the month of monitoring.

(3.) ACUTE TOXICITY PASS/FAIL PERMIT LIMIT APPLIES TO -

Discharges to Freshwater with an Instream Waste Concentration (IWC) < 0.25%

Discharges to Saltwater with Tidal receiving waters not modeled

The permittee shall conduct acute toxicity tests on an annual basis, once each calendar year, using protocols defined in the North Carolina Procedure Document entitled “*Pass/Fail Methodology For Determining Acute Toxicity In A Single Effluent Concentration*” (Revised December 2010).

For Freshwater receiving streams, the monitoring shall be performed as a *Ceriodaphnia dubia* 24 hour static test. If another test organism has been approved by the Division for this facility, it will be listed on the Supplement to the CoC.

For Saltwater receiving streams, the monitoring shall be performed as a Mysid Shrimp (*Mysidopsis bahia*) 24 hour static test. If another test organism has been approved by the Division for this facility, it will be listed on the Supplement to the CoC.

The effluent concentration at which there may be at no time significant acute mortality is **90%** (defined as treatment two in the procedure document). Effluent sampling for this testing must be obtained during a representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

Should any single annual monitoring test indicate a failure to meet specified limits, then quarterly monitoring will begin immediately. Upon passing, this quarterly test requirement will revert back to an annual requirement of once per calendar year.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the month in which it was performed, using the parameter code specified below and DWR Form AT-2.

For Freshwater receiving streams, use parameter code TGE3B.

For Saltwater receiving streams, use parameter code TGE3E.

The DWR Form AT-2 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Resources
Water Sciences Section
1621 Mail Service Center
Raleigh, N.C. 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Water Sciences Section no later than 30 days after the end of the month in which the toxicity test was sampled.

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during the year in which toxicity monitoring is required, the permittee will submit the aquatic toxicity (AT) test form with the notation of "No Flow" in the comment area of the form. The report shall be submitted to the Water Sciences Section at the address cited above.

The permittee must report on the discharge monitoring report (DMR) form whether the test passes or fails at the specified effluent concentration.

Should the permittee fail to monitor during the year in which toxicity monitoring is required, then quarterly monitoring will begin immediately until such time that a single test is passed. Upon passing, this quarterly test requirement will revert back to an annual requirement of once per calendar year.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, the permittee may be required to perform additional testing and if necessary, apply for an individual permit which could include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival and appropriate environmental controls, shall constitute an **invalid test** and will require immediate follow-up testing to be completed no later than the last day of the month following the month of monitoring.

PART II

STANDARD CONDITIONS FOR NPDES PERMITS

Section A. Definitions

2/Month

Samples are collected twice per month with at least ten calendar days between sampling events. These samples shall be representative of the wastewater discharged during the sample period.

3/Week

Samples are collected three times per week on three separate calendar days. These samples shall be representative of the wastewater discharged during the sample period.

Act or "the Act"

The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 USC 1251, et. seq.

Annual Average

The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar year. In the case of fecal coliform, the geometric mean of such discharges.

Arithmetic Mean

The summation of the individual values divided by the number of individual values.

Bypass

The known diversion of waste streams from any portion of a treatment facility including the collection system, which is not a designed or established or operating mode for the facility.

Calendar Day

The period from midnight of one day until midnight of the next day. However, for purposes of this permit, any consecutive 24-hour period that reasonably represents the calendar day may be used for sampling.

Calendar Week

The period from Sunday through the following Saturday.

Calendar Quarter

One of the following distinct periods: January through March, April through June, July through September, and October through December.

Composite Sample

A sample collected over a 24-hour period by continuous sampling or combining grab samples of at least 100 mL in such a manner as to result in a total sample representative of the wastewater discharge during the sample period. The Director may designate the most appropriate method (specific number and size of aliquots necessary, the time interval between grab samples, etc.) on a case-by-case basis. Samples may be collected manually or automatically. Composite samples may be obtained by the following methods:

- (1) Continuous: a single, continuous sample collected over a 24-hour period proportional to the rate of flow.
- (2) Constant time/variable volume: a series of grab samples collected at equal time intervals over a 24 hour period of discharge and combined proportional to the rate of flow measured at the time of individual sample collection, or
- (3) Variable time/constant volume: a series of grab samples of equal volume collected over a 24 hour period with the time intervals between samples determined by a preset number of gallons passing the sampling point. Flow measurement between sample intervals shall be determined by use of a flow recorder and totalizer, and the preset gallon interval between sample collection fixed at no greater than 1/24 of the expected total daily flow at the treatment system, or
- (4) Constant time/constant volume: a series of grab samples of equal volume collected over a 24-hour period at a constant time interval. Use of this method requires prior approval by the Director. This method may only be used in situations where effluent flow rates vary less than 15 percent. The following restrictions also apply:
 Influent and effluent grab samples shall be of equal size and of no less than 100 milliliters
 Influent samples shall not be collected more than once per hour.

Permittees with wastewater treatment systems whose detention time < 24 hours shall collect effluent grab samples at intervals of no greater than 20 minutes apart during any 24-hour period.

Permittees with wastewater treatment systems whose detention time exceeds 24 hours shall collect effluent grab samples at least every six hours; there must be a minimum of four samples during a 24-hour sampling period.

Continuous flow measurement

Flow monitoring that occurs without interruption throughout the operating hours of the facility. Flow shall be monitored continually except for the infrequent times when there may be no flow or for infrequent maintenance activities on the flow device.

Daily Discharge

The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants measured in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (40 CFR 122.2; see also "Composite Sample," above.)

Daily Maximum

The highest "daily discharge" during the calendar month.

Daily Sampling

Parameters requiring daily sampling shall be sampled 5 out of every 7 days per week unless otherwise specified in the permit. Sampling shall be conducted on weekdays except where holidays or other disruptions of normal operations prevent weekday sampling. If sampling is required for all seven days of the week for any permit parameter(s), that requirement will be so noted on the Effluent Limitations and Monitoring Page(s).

DWR or "the Division"

The Division of Water Resources, Department of Environment and Natural Resources.

Effluent

Wastewater discharged following all treatment processes from a water pollution control facility or other point source whether treated or untreated.

EMC

The North Carolina Environmental Management Commission

EPA

The United States Environmental Protection Agency

Facility Closure

Cessation of all activities that require coverage under this NPDES permit. Completion of facility closure will allow this permit to be rescinded.

Geometric Mean

The Nth root of the product of the individual values where N = the number of individual values. For purposes of calculating the geometric mean, values of "0" (or "< [detection level]") shall be considered = 1.

Grab Sample

Individual samples of at least 100 mL collected over a period of time not exceeding 15 minutes. Grab samples can be collected manually. Grab samples must be representative of the discharge (or the receiving stream, for instream samples).

Hazardous Substance

Any substance designated under 40 CFR Part 116 pursuant to Section 311 of the CWA.

Instantaneous flow measurement

The flow measured during the minimum time required for the flow measuring device or method to produce a result in that instance. To the extent practical, instantaneous flow measurements coincide with the collection of any grab samples required for the same sampling period so that together the samples and flow are representative of the discharge during that sampling period.

Monthly Average (concentration limit)

The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar month. In the case of fecal coliform or other bacterial parameters or indicators, the geometric mean of such discharges.

Permit Issuing Authority

The Director of the Division of Water Resources.

Quarterly Average (concentration limit)

The arithmetic mean of all samples taken over a calendar quarter.

Severe property damage

Substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage excludes economic loss caused by delays in production.

Toxic Pollutant:

Any pollutant listed as toxic under Section 307(a)(1) of the CWA.

Upset

An incident beyond the reasonable control of the Permittee causing unintentional and temporary noncompliance with permit effluent limitations and/or monitoring requirements. An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Weekly Average (concentration limit)

The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar week. In the case of fecal coliform or other bacterial parameters or indicators, the geometric mean of such discharges.

Section B. General Conditions

I. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [40 CFR 122.41].

- a. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. The CWA provides that any person who violates section[s] 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$37,500 per day for each violation. [33 USC 1319(d) and 40 CFR 122.41(a)(2)]
- c. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. [33 USC 1319(c)(1) and 40 CFR 122.41(a)(2)]
- d. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. [33 USC 1319(c)(2) and 40 CFR 122.41(a)(2)]
- e. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily

injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions. [40 CFR 122.41(a)(2)]

- f. Under state law, a civil penalty of not more than \$25,000 per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit. [North Carolina General Statutes § 143-215.6A]
- g. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500. Penalties for Class II violations are not to exceed \$16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$177,500. [33 USC 1319(g)(2) and 40 CFR 122.41(a)(3)]

2. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit with a reasonable likelihood of adversely affecting human health or the environment [40 CFR 122.41(d)].

3. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" (Part II.C.4), "Upsets" (Part II.C.5) and "Power Failures" (Part II.C.7), nothing in this permit shall be construed to relieve the Permittee from any responsibilities, liabilities, or penalties for noncompliance pursuant to NCGS 143-215.3, 143-215.6 or Section 309 of the Federal Act, 33 USC 1319. Furthermore, the Permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

4. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under NCGS 143-215.75 et seq. or Section 311 of the Federal Act, 33 USC 1321. Furthermore, the Permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

5. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations [40 CFR 122.41(g)].

6. Onshore or Offshore Construction

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

7. Severability

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby [NCGS 150B-23].

8. Duty to Provide Information

The Permittee shall furnish to the Permit Issuing Authority, within a reasonable time, any information which the Permit Issuing Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also furnish to the Permit Issuing Authority upon request, copies of records required by this permit [40 CFR 122.41(h)].

9. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit [40 CFR 122.41(b)].

10. Expiration of Permit

The Permittee is not authorized to discharge after the expiration date. In order to receive automatic authorization to discharge beyond the expiration date, the Permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) [40 CFR 122.21(d)] Any Permittee that has not requested renewal at least 180 days prior to expiration, or any Permittee that does not have a permit after the expiration and has not requested renewal at least 180 days prior to expiration, will subject the Permittee to enforcement procedures as provided in NCGS 143-215.6 and 33 USC 1251 et. seq.

11. Signatory Requirements

All applications, reports, or information submitted to the Permit Issuing Authority shall be signed and certified [40 CFR 122.41(k)].

a. All permit applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures .
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official [40 CFR 122.22].

b. All reports required by the permit and other information requested by the Permit Issuing Authority shall be signed by a person described in paragraph a. above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;
- (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- (3) The written authorization is submitted to the Permit Issuing Authority [40 CFR 122.22]

c. Changes to authorization: If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative [40 CFR 122.22]

d. Certification. Any person signing a document under paragraphs a. or b. of this section shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

12. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition [40 CFR 122.41(f)].

13. Permit Modification, Revocation and Reissuance, or Termination

The issuance of this permit does not prohibit the permit issuing authority from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules, and regulations contained in Title 40, Code of Federal Regulations, Parts 122 and 123; Title 15A of the North Carolina Administrative Code, Subchapter 02H .0100; and North Carolina General Statute 143.215.1 et. al.

14. Annual Administering and Compliance Monitoring Fee Requirements

The Permittee must pay the annual administering and compliance monitoring fee within thirty days after being billed by the Division. Failure to pay the fee in a timely manner in accordance with 15A NCAC 02H .0105(b)(2) may cause this Division to initiate action to revoke the permit.

Section C. Operation and Maintenance of Pollution Controls**1. Certified Operator**

Owners of classified water pollution control systems must designate operators, certified by the Water Pollution Control System Operators Certification Commission (WPCSOCC), of the appropriate type and grade for the system, and, for each classification must [T15A NCAC 08G .0201]:

- a. designate one Operator In Responsible Charge (ORC) who possesses a valid certificate of the type and grade at least equivalent to the type and grade of the system;
- b. designate one or more Back-up Operator(s) in Responsible Charge (Back-up ORCs) who possesses a valid certificate of the type of the system and no more than one grade less than the grade of the system, with the exception of no backup operator in responsible charge is required for systems whose minimum visitation requirements are twice per year; and
- c. submit a signed completed "Water Pollution Control System Operator Designation Form" to the Commission (or to the local health department for owners of subsurface systems) countersigned by the designated certified operators, designating the Operator in Responsible Charge (ORC) and the Back-up Operator in Responsible Charge (Back-up ORC):
 - (1) 60 calendar days prior to wastewater or residuals being introduced into a new system; or
 - (2) within 120 calendar days following:
 - receiving notification of a change in the classification of the system requiring the designation of a new Operator in Responsible Charge (ORC) and Back-up Operator in Responsible Charge (Back-up ORC) of the proper type and grade; or
 - a vacancy in the position of Operator in Responsible Charge (ORC) or Back-up Operator in Responsible Charge (Back-up ORC).
 - (3) within seven calendar days of vacancies in both ORC and Back-up ORC positions replacing or designating at least one of the responsibilities.

The ORC of each Class I facility (or the Back-up ORC, when acting as surrogate for the ORC) must:

Visit the facility as often as is necessary to insure proper operation of the treatment system; the treatment facility must be visited at least weekly

Comply with all other conditions of 15A NCAC 08G .0204.

The ORC of each Class II, III and IV facility (or the Back-up ORC, when acting as surrogate for the ORC) must:

Visit the facility as often as is necessary to insure proper operation of the treatment system; the treatment facility must be visited at least five days per week, excluding holidays

Properly manage and document daily operation and maintenance of the facility

Comply with all other conditions of 15A NCAC 08G .0204.

2. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the Permittee to install and operate backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit [40 CFR 122.41(e)].

NOTE: Properly and officially designated operators are fully responsible for all proper operation and maintenance of the facility, and all documentation required thereof, whether acting as a contract operator [subcontractor] or a member of the Permittee's staff.

3. Need to Halt or Reduce not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the condition of this permit [40 CFR 122.41(c)].

4. Bypassing of Treatment Facilities

a. Bypass not exceeding limitations [40 CFR 122.41(m)(2)]

The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Paragraphs b. and c. of this section.

b. Notice [40 CFR 122.41(m)(3)]

- (1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass; including an evaluation of the anticipated quality and effect of the bypass.
- (2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in Part II.E.6. (24-hour notice).

c. Prohibition of Bypass

- (1) Bypass from the treatment facility is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The Permittee submitted notices as required under Paragraph b. of this section.
- (2) Bypass from the collection system is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for a bypass as provided in any current or future system-wide collection system permit associated with the treatment facility.
- (3) The Permit Issuing Authority may approve an anticipated bypass, after considering its adverse effects, if the Permit Issuing Authority determines that it will meet the three conditions listed above in Paragraph c. (1) of this section.

5. Upsets

- a. Effect of an upset [40 CFR 122.41(n)(2)]: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph b. of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- b. Conditions necessary for a demonstration of upset: Any Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - (2) The Permittee facility was at the time being properly operated; and
 - (3) The Permittee submitted notice of the upset as required in Part II.E.6.(b) of this permit.
 - (4) The Permittee complied with any remedial measures required under Part II.B.2. of this permit.
- c. Burden of proof [40 CFR 122.41(n)(4)]: The Permittee seeking to establish the occurrence of an upset has the burden of proof in any enforcement proceeding.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be utilized/disposed of in accordance with NCGS 143-215.1 and in a manner such as to prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States except as permitted

by the Commission. The Permittee shall comply with all applicable state and Federal regulations governing the disposal of sewage sludge, including 40 CFR 503, Standards for the Use and Disposal of Sewage Sludge; 40 CFR Part 258, Criteria For Municipal Solid Waste Landfills; and 15A NCAC Subchapter 2T, Waste Not Discharged To Surface Waters. The Permittee shall notify the Permit Issuing Authority of any significant change in its sludge use or disposal practices.

7. Power Failures

The Permittee is responsible for maintaining adequate safeguards (as required by 15A NCAC 02H .0124) to prevent the discharge of untreated or inadequately treated wastes during electrical power failures either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

Section D. Monitoring and Records

1. Representative Sampling

Samples collected and measurements taken, as required herein, shall be representative of the permitted discharge. Samples collected at a frequency less than daily shall be taken on a day and time that is representative of the discharge for the period the sample represents. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Permit Issuing Authority [40 CFR 122.41(j)].

2. Reporting

Monitoring results obtained during the previous month(s) shall be summarized for each month and reported on a monthly Discharge Monitoring Report (DMR) Form (MR 1, 1.1, 2, 3) or alternative forms approved by the Director, postmarked no later than the last calendar day of the month following the completed reporting period.

The first DMR is due on the last day of the month following the effective date on the Certificate of Coverage issued with this permit or in the case of a new facility, on the last day of the month following the commencement of discharge. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the following address:

NC DENR / Division of Water Resources / Water Quality Permitting Section
ATTENTION: Central Files
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

3. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from the true discharge rates throughout the range of expected discharge volumes. Flow measurement devices shall be accurately calibrated at a minimum of once per year and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. The Director shall approve the flow measurement device and monitoring location prior to installation.

Once-through condenser cooling water flow monitored by pump logs, or pump hour meters as specified in Part I of this permit and based on the manufacturer's pump curves shall not be subject to this requirement.

4. Test Procedures

Laboratories used for sample analysis must be certified by the Division. Permittees should contact the Division's Laboratory Certification Section (919 733-3908 or <http://portal.ncdenr.org/web/wq/lab/cert>) for information regarding laboratory certifications.

Facilities whose personnel are conducting testing of field-certified parameters only must hold the appropriate field parameter laboratory certifications.

Test procedures for the analysis of pollutants shall conform to the EMC regulations (published pursuant to NCGS 143-215.63 et. seq.), the Water and Air Quality Reporting Acts, and to regulations published pursuant to Section 304(g), 33 USC 1314, of the CWA (as amended), and 40 CFR 136; or in the case of sludge use or disposal,

approved under 40 CFR 136, unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this permit [40 CFR 122.41].

To meet the intent of the monitoring required by this permit, all test procedures must produce minimum detection and reporting levels that are below the permit discharge requirements and all data generated must be reported down to the minimum detection or lower reporting level of the procedure. If no approved methods are determined capable of achieving minimum detection and reporting levels below permit discharge requirements, then the most sensitive (method with the lowest possible detection and reporting level) approved method must be used.

5. Penalties for Tampering

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR 122.41].

6. Records Retention

Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the Permittee shall retain records of all monitoring information, including:

- all calibration and maintenance records
- all original strip chart recordings for continuous monitoring instrumentation
- copies of all reports required by this permit
- copies of all data used to complete the application for this permit

These records or copies shall be maintained for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time [40 CFR 122.41].

7. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information [40 CFR 122.41]:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

8. Inspection and Entry

The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), upon the presentation of credentials and other documents as may be required by law, to;

- a. Enter, at reasonable times, upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location [40 CFR 122.41(i)].

Section E Reporting Requirements**1. Change in Discharge**

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

2. Planned Changes

The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility [40 CFR 122.41(l)]. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for new sources at 40 CFR 122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or
- c. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

3. Anticipated Noncompliance

The Permittee shall give advance notice to the Director of any planned changes to the permitted facility or other activities that might result in noncompliance with the permit [40 CFR 122.41(l)(2)].

4. Transfers

This permit is not transferable to any person without prior written notice to and approval from the Director in accordance with 40 CFR 122.61. The Director may condition approval in accordance with NCGS 143-215.1, in particular NCGS 143-215.1(b)(4)b.2., and may require modification or revocation and reissuance of the permit, or a minor modification, to identify the new permittee and incorporate such other requirements as may be necessary under the CWA [40 CFR 122.41(l)(3), 122.61] or state statute.

5. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit [40 CFR 122.41(l)(4)].

- a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) (See Part II.D.2) or forms provided by the Director for reporting results of monitoring of sludge use or disposal practices.
- b. If the Permittee monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 and at a sampling location specified in this permit or other appropriate instrument governing the discharge, the results of such monitoring shall be included in the calculation and reporting of the data submitted on the DMR.

6. Twenty-four Hour Reporting

- a. The Permittee shall report to the Director or the appropriate Regional Office any noncompliance that potentially threatens public health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance, and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR 122.41(l)(6)].
- b. The Director may waive the written report on a case-by-case basis for reports under this section if the oral report has been received within 24 hours.
- c. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

7. Other Noncompliance

The Permittee shall report all instances of noncompliance not reported under Part II.E.5 and 6. of this permit at the time monitoring reports are submitted. The reports shall contain the information listed in Part II.E.6. of this permit [40 CFR 122.41(l)(7)].

8. Other Information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information [40 CFR 122.41(l)(8)].

9. Noncompliance Notification

The Permittee shall report by telephone to either the central office or the appropriate regional office of the Division as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

- a. Any occurrence at the water pollution control facility which results in the discharge of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a sludge digester; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances.
- b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.
- c. Any failure of a pumping station, sewer line, or treatment facility resulting in a by-pass without treatment of all or any portion of the influent to such station or facility.

Persons reporting such occurrences by telephone shall also file a written report within 5 days following first knowledge of the occurrence. Also see reporting requirements for municipalities in Part IV.C.2.c. of this permit.

10. Availability of Reports

Except for data determined to be confidential under NCGS 143-215.3 (a)(2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms shall be available for public inspection at the offices of the Division. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143-215.1(b)(2) or in Section 309 of the Federal Act.

11. Penalties for Falsification of Reports

The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than two years per violation, or by both [40 CFR 122.41].

12. Annual Performance Reports

Permittees who own or operate facilities that primarily collect or treat municipal or domestic wastewater and have an average annual flow greater than 200,000 gallons per day shall provide an annual report to the Permit Issuing Authority and to the users/customers served by the Permittee (NCGS 143-215.1C). The report shall summarize the performance of the collection or treatment system, as well as the extent to which the facility was compliant with applicable Federal or State laws, regulations and rules pertaining to water quality. The report shall be provided no later than sixty days after the end of the calendar or fiscal year, depending upon which annual period is used for evaluation.

The report shall be sent to:

NC DENR / Division of Water Resources / Water Quality Permitting Section
 ATTENTION: Central Files
 1617 Mail Service Center
 Raleigh, North Carolina 27699-1617

PART III OTHER REQUIREMENTS

Section A. Construction

- a. The Permittee shall not commence construction of wastewater treatment facilities, nor add to the plant's treatment capacity, nor change the treatment process(es) utilized at the treatment plant unless (1) the Division has issued an Authorization to Construct (AtC) permit or (2) the Permittee is exempted from such AtC permit requirements under Item b. of this Section.
- b. In accordance with NCGS 143-215.1(a5) [SL 2011-394], no permit shall be required to enter into a contract for the construction, installation, or alteration of any treatment work or disposal system or to construct, install, or alter any treatment works or disposal system within the State when the system's or work's principle function is to conduct, treat, equalize, neutralize, stabilize, recycle, or dispose of industrial waste or sewage from an industrial facility and the discharge of the industrial waste or sewage is authorized under a permit issued for the discharge of the industrial waste or sewage into the waters of the State. Notwithstanding the above, the permit issued for the discharge may be modified if required by federal regulation.
- c. Issuance of an AtC will not occur until Final Plans and Specifications for the proposed construction have been submitted by the Permittee and approved by the Division.

Section B. Groundwater Monitoring

The Permittee shall, upon written notice from the Director, conduct groundwater monitoring as may be required to determine the compliance of this NPDES permitted facility with the current groundwater standards.

Section C. Changes in Discharges of Toxic Substances

The Permittee shall notify the Permit Issuing Authority as soon as it knows or has reason to believe (40 CFR 122.42):

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels";
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels";
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

Section D. Facility Closure Requirements

The Permittee must notify the Division at least 90 days prior to the closure of any wastewater treatment system covered by this permit. The Division may require specific measures during deactivation of the system to prevent adverse impacts to waters of the State. This permit cannot be rescinded while any activities requiring this permit continue at the permitted facility.